

Claim 1. Cancelled.

2. (Currently Amended) The DNA of claim 20, and which contains the whole of the nucleotide sequence of SEQ ID NO:4 ~~or its complementary nucleotide sequence.~~

3. (Currently Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, ~~and which contains the whole of having the~~ nucleotide sequence of SEQ ID NO:5 ~~or its an isolated DNA complementary nucleotide sequence thereto.~~

4. (Currently Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, ~~and which contains the whole of having the~~ nucleotide sequence of SEQ ID NO:6 ~~or its an isolated DNA complementary nucleotide sequence thereto.~~

Claim 5. Cancelled.

6. (Previously Amended) The DNA of any one of claims 2, 3, 4, 20, 21 or 22, which is inserted into an autonomously replicable vector.

7. (Currently Amended) ~~The~~ A transformed cell obtained by introducing the DNA of claim 6, which is introduced into an appropriate host cell derived from a microbe, plant or animal.

Claims 8-10. Cancelled.

J<sup>3</sup> 11. (Currently Amended) A process for producing a desert hedgehog protein of human origin, which comprises ~~expressing a DNA~~ culturing the transformed cell of claim 7 to generate said desert hedgehog protein of human origin, and collecting the generated desert hedgehog protein of human origin.

Claim 12. Cancelled.

J<sup>4</sup> 13. (Previously Amended) The process of claim 11, wherein the generated desert hedgehog protein of human origin is collected by one or more methods selected from the group consisting of salting out, dialysis, filtration, concentration, fractional precipitation, ion-exchange chromatography, gel filtration chromatography, adsorption chromatography, isoelectric focusing chromatography, hydrophobic chromatography, reversed phase chromatography, affinity chromatography, gel electro-phoresis and/or isoelectric focusing gel electrophoresis.

J<sup>5</sup> 14. (Previously Amended) The process of claim 11, wherein the generated desert hedgehog protein of human origin is collected through immunoaffinity chromatography using a

15 ant monoclonal antibody that recognizes a desert hedgehog protein of human origin.

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Claims 15-19. Cancelled.

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20. (Currently Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, ~~and which encodes the whole of~~ having the amino acid sequence of SEQ ID NO:1, or ~~its~~ an isolated DNA complementary ~~nucleotide sequence~~ thereto.

21. (Currently Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, ~~and which encodes the whole of~~ having the amino acid sequence of SEQ ID NO:2, or ~~its~~ an isolated DNA complementary ~~nucleotide sequence~~ thereto.

22. (Currently Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, ~~and which encodes the whole of~~ having the amino acid sequence of SEQ ID NO:3, or ~~its~~ an isolated DNA complementary ~~nucleotide sequence~~ thereto.

23. (Currently Amended) The DNA of claim 21, which contains the whole of the nucleotide sequence of SEQ ID NO: 5 ~~or its complementary nucleotide sequence~~.

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